

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. **Applicant/Contact name and address:**

INDIAN SPRINGS RANCH WATER & SEWER LLC
PO BOX 226
EUREKA MT 59917-0226

2. **Type of action:** Application to Change an Existing Non-Irrigation Water Right 76D 30155902

3. **Water source name:** Indian Creek

4. **Location affected by project:**

Point of diversion (POD) in Lincoln County (proposed infiltration gallery):

- SWSWSE Section 36, Township 37N, Range 27W.

Place of use in Lincoln County (proposed recharge basin):

- SESESW Section 36, Township 37N, Range 27W.

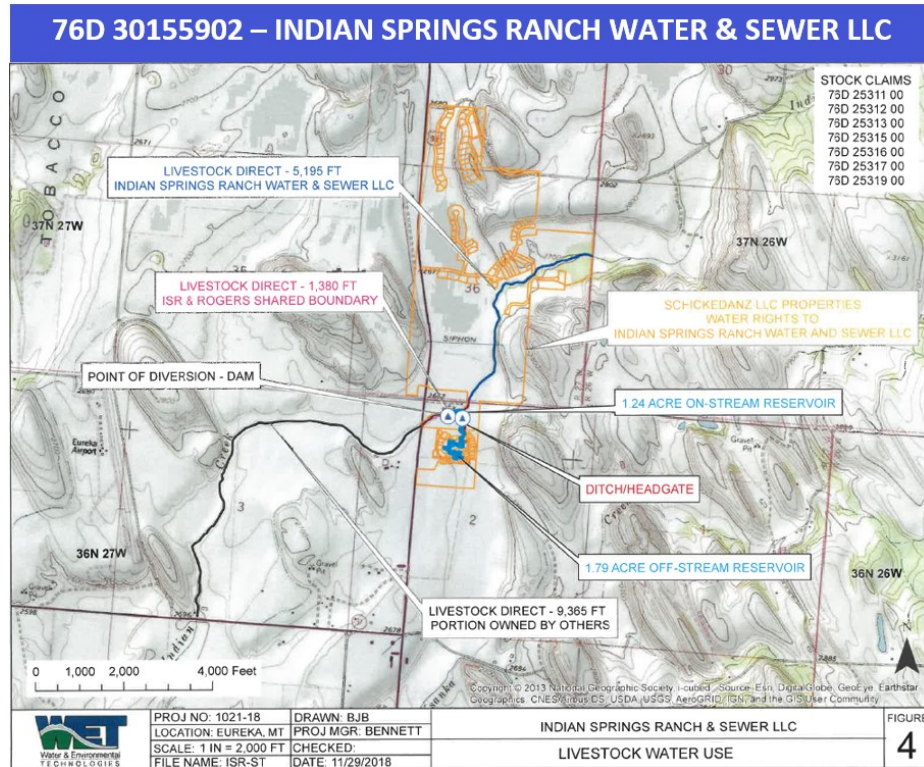


Figure 1: Map of historic places of use and points of diversion.

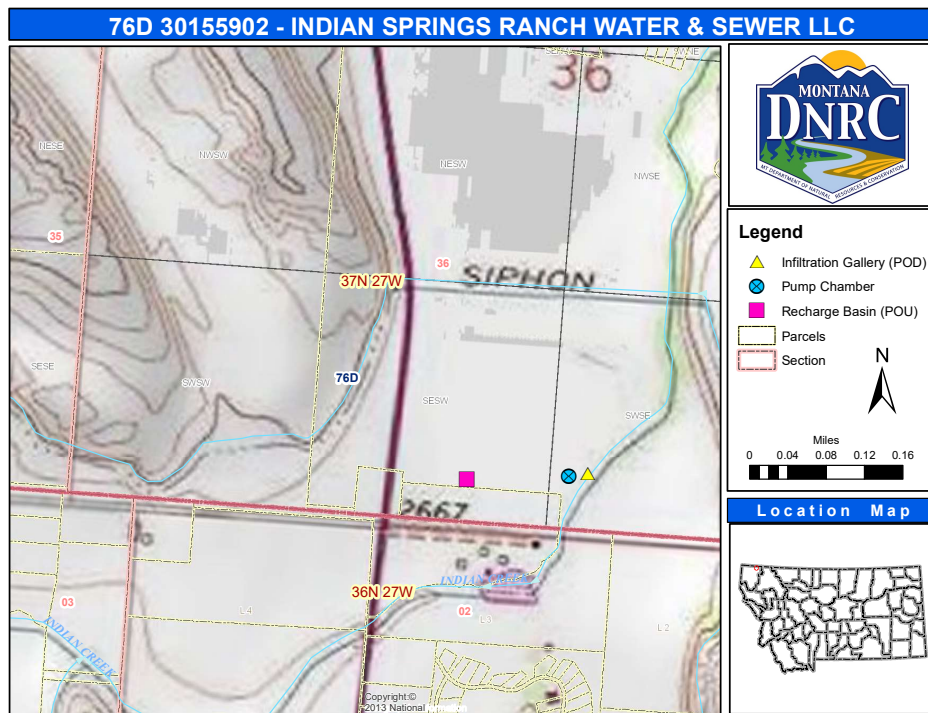


Figure 2: Map of proposed place of use and point of diversion.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The Applicant proposes to change the seven water rights listed in Table 1. The purpose and source for these claims is stock use from Indian Creek. As stated on each Claim's General Abstract, the Montana Water Court determined that a flow rate and volume quantification is required to adequately administer these Claims. Per the Montana Water Court, the cumulative maximum flow rate that may be diverted at any one time under these seven claims may not exceed the sum of 4.0 cubic feet per second (CFS) and the cumulative maximum volume that may be diverted under these seven claims may not exceed the sum of 260.41 acre-feet (AF) per year. The means of diversion for these claims is livestock direct from source, a dam (associated with an on-stream stock reservoir), and a headgate with ditch or pipeline/flood and dike (associated with an off-stream stock reservoir). Table 2 summarizes the details of the water rights proposed for change.

Table 1: Statements of Claim Proposed for Change

| Water Right Number | Water Right Status |
|--------------------|--------------------|
| 76D 30147049 | SEVERED |
| 76D 30149966 | SEVERED |
| 76D 30149967 | SEVERED |
| 76D 30149968 | SEVERED |
| 76D 30149969 | SEVERED |
| 76D 30149970 | SEVERED |
| 76D 30149971 | SEVERED |

Table 2: Summary of the Statements of Claim Proposed for Change

| Table 2: Summary of the Statements of Claim Proposed for Change | | | | | | | | | | |
|---|--------------------|-----------------|-------------|---------------------------|---------|--------------|---|--|--|--|
| Water Right Number | Priority Date | Flow Rate (CFS) | Volume (AF) | Period of Diversion & Use | Purpose | Source Name | Means of Diversion | Points of Diversion | Place of Use | Reservoirs |
| 76D 30147049 | March 25, 1899 | 4.00 | 249.94 | January 1 – December 31 | Stock | Indian Creek | Livestock Direct from Source (LDS) Dam (D) Headgate w/ Ditch or Pipeline/Flood and Dike (HPD) | Three PODs (LDS, D, & HPD): N2NENW Sec 2, T36N, R27W One POD (LDS): S2NE Sec 36, T37N, R27W One POD (LDS): W2W2SE Sec 36, T37N, R27W | N2NENW Sec 2, T36N, R27W S2NE Sec 36, T37N, R27W W2W2SE Sec 36, T37N, R27W N2NENW Sec 2, T36N, R27W | Reservoir No. 1: N2NENW Sec 2, T36N, R27W Reservoir No. 2: NENW Sec 2, T36N, R27W |
| 76D 30149966 | July 14, 1894 | 3.75 | 249.94 | | | | | | | |
| 76D 30149967 | September 19, 1902 | 4.00 | 249.94 | | | | | | | |
| 76D 30149968 | October 24, 1884 | 4.00 | 249.94 | | | | | | | |
| 76D 30149969 | May 1, 1889 | 4.00 | 249.94 | | | | | | | |
| 76D 30149970 | November 2, 1889 | 4.00 | 249.94 | | | | | | | |
| 76D 30149971 | September 13, 1903 | 4.00 | 249.94 | | | | | | | |
| Total Claimed | | 4.00* | 260.41** | | | | | | | |

** PER THE MONTANA WATER COURT, THE CUMULATIVE FLOW RATE AT ANY ONE TIME UNDER THESE CLAIMS MAY NOT EXCEED 4.00 CFS.*

*** PER THE MONTANA WATER COURT, THE CUMULATIVE MAXIMUM VOLUME UNDER THESE CLAIMS MAY NOT EXCEED 260.41 AC-FT PER YEAR.*

The Applicant proposes changing 0.11 CFS (50.0 GPM) and up to 6.38 AF/year from stock use to a mitigation purpose, adding an infiltration gallery point of diversion (POD) in Indian Creek, and changing the place of use for the 6.38 AF/year being changed to a mitigation purpose. The Applicant proposes no increase in historically diverted flow rate, volume, or consumed volume.

Under this change, water that was historically diverted for, and consumed by, stock from Indian Creek would instead be diverted at 0.11 CFS (50.0 GPM) from Indian Creek via an infiltration gallery. Water will flow from the infiltration gallery to a buried 1,500-gallon concrete tank. A submersible pump set in the tank will function as a secondary diversion to pump a constant 4.0 GPM from the concrete tank out to a groundwater recharge basin. The location and infiltration rate of this mitigation recharge basin is designed to offset the depletions associated with the concurrently submitted groundwater permit application (76D 30155903). Although only 4.0 GPM is necessary to satisfy the required mitigation volume, the Applicant proposes to divert 50.0 GPM to keep the system from freezing in the winter. The additionally diverted 46.0 GPM will not be consumed, it will flow through the concrete tank overflow outlet pipe and be discharged back to Indian Creek within 75-feet downstream of the POD. No other water right diversions exist between the POD and the overflow discharge outlet. Table 3 summarizes the details of the proposed changes including the legal land descriptions of the proposed infiltration gallery POD and recharge basin place of use.

Table 3: Summary of the Proposed Changes
(bold italicized words identify changed water right properties)

| Water Right Number | Priority Date | Flow Rate (CFS) | Volume (AF) | Per. of Div. & Use | Purpose | Source Name | Means of Diversion | Points of Diversion | Place of Use | Reservoir |
|--------------------|---------------|---|--|----------------------|--------------------------------|--------------|---|---|--|--|
| 76D 30147049 | Mar 25, 1899 | 3.89 (Stock) <i>0.11</i> <i>(50.0 GPM)</i> <i>(mitigation)</i> | 243.56 (stock) <i>6.38</i> <i>(mitigation)</i> | Jan 1 – Dec 31 | Stock <i>Mitigation</i> | Indian Creek | Livestock Direct from Source (LDS) Dam (D) Headgate w/ Ditch or Pipeline/ Flood and Dike (HPD) <i>Infiltration Gallery</i> | Three PODs (LDS, D, & HPD): N2NENW Sec 2, T36N, R27W One POD (LDS): S2NE Sec 36, T37N, R27W One POD (LDS): W2W2SE Sec 36, T37N, R27W <i>Infiltration Gallery: SWSWSE Sec 36, T37N, R27W</i> | N2NENW Sec 2, T36N, R27W S2NE Sec 36, T37N, R27W W2W2SE Sec 36, T37N, R27W N2NENW Sec 2, T36N, R27W <i>Recharge Basin: SESESW Sec 36, T37N, R27W</i> | Reservoir No. 1: N2NENW Sec 2, T36N, R27W Reservoir No. 2: NENW Sec 2, T36N, R27W |
| 76D 30149966 | July 14, 1894 | 3.64 (Stock) <i>0.11</i> <i>(50.0 GPM)</i> <i>(mitigation)</i> | 243.56 (stock) <i>6.38</i> <i>(mitigation)</i> | | | | | | | |
| 76D 30149967 | Sept 19, 1902 | 3.89 (Stock) <i>0.11</i> <i>(50.0 GPM)</i> <i>(mitigation)</i> | 243.56 (stock) <i>6.38</i> <i>(mitigation)</i> | | | | | | | |
| 76D 30149968 | Oct 24, 1884 | 3.89 (Stock) <i>0.11</i> <i>(50.0 GPM)</i> <i>(mitigation)</i> | 243.56 (stock) <i>6.38</i> <i>(mitigation)</i> | | | | | | | |
| 76D 30149969 | May 1, 1889 | 3.89 (Stock) <i>0.11</i> <i>(50.0 GPM)</i> <i>(mitigation)</i> | 243.56 (stock) <i>6.38</i> <i>(mitigation)</i> | | | | | | | |
| 76D 30149970 | Nov 2, 1889 | 3.89 (Stock) <i>0.11</i> <i>(50.0 GPM)</i> <i>(mitigation)</i> | 243.56 (stock) <i>6.38</i> <i>(mitigation)</i> | | | | | | | |
| 76D 30149971 | Sept 13, 1903 | 3.89 (Stock) <i>0.11</i> <i>(50.0 GPM)</i> <i>(mitigation)</i> | 243.56 (stock) <i>6.38</i> <i>(mitigation)</i> | | | | | | | |
| Total Claimed | | 4.00* | 260.41** | | | | | | | |

* PER THE MONTANA WATER COURT, THE CUMULATIVE FLOW RATE AT ANY ONE TIME UNDER THESE CLAIMS MAY NOT EXCEED 4.00 CFS.

** PER THE MONTANA WATER COURT, THE CUMULATIVE MAXIMUM VOLUME UNDER THESE CLAIMS MAY NOT EXCEED 260.41 AC-FT PER YEAR.

The project is in the Kootenai River Basin (76D) in an area that is not subject to water right basin closures or controlled groundwater area restrictions.

The DNRC shall authorize a water right change if the applicant proves the criteria in 85-2-402 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:

- U.S. Fish and Wildlife Service (USFWS): National Wetlands Inventory Wetlands Mapper
- Montana Natural Heritage Program: Endangered, Threatened Species, and Species of Special Concern
- Montana Department of Fish Wildlife & Parks (MTDFWP): Dewatered Stream Information
- Montana Department of Environmental Quality (MTDEQ): Clean Water Act Information Center
- U.S. Natural Resources Conservation Service (NRCS): Web Soil Survey

Part II. Environmental Review

1. Environmental Impact Checklist:

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| <p>PHYSICAL ENVIRONMENT</p> |
|------------------------------------|

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - *Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

The Applicant proposes changing 5.2 AF of Indian Creek water from stock to mitigation. Indian Creek is listed as chronically dewatered from Burma Road to the mouth by MTDFWP. This change will not result in an increase in total diverted or consumed flow rate and volume over historic use.

Determination: No significant impact.

Water quality - *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

Indian Creek is a tributary of the Tobacco River, which is a tributary of the Kootenai River (Lake Koocanusa).

According to the MTDEQ 2020 Clean Water Act Information Center Water Quality Information, the Tobacco River is listed as “fully supporting” for: primary contact recreation, agriculture, and drinking water. The aquatic life use is listed as “not fully supporting,” with the probable causes being physical substrate habitat alterations and sedimentation/siltation. The Tobacco River’s Use Class is “B-1,” meaning the waters are classified as suitable for drinking, culinary, and food processing purposes after conventional treatment; bathing, swimming and recreation; growth and propagation of salmonid fishes and associated aquatic life, waterfowl and furbearers; and agricultural and industrial water supply. The Water Quality Category is “4A,” meaning all total maximum daily load (TMDL) plans needed to rectify all identified threats or impairments have been completed and approved. The surface water depletions anticipated from this proposed project will not affect water quality of the Tobacco River.

According to the MTDEQ 2020 Clean Water Act Information Center Water Quality Information, Lake Koocanusa is listed as “fully supporting” for: primary contact recreation, agriculture, and drinking water. The aquatic life use is listed as “not fully supporting,” and “threatened,” with the probable causes being Selenium and Flow Regime Modification. Lake Koocanusa’s Use Class is “B-1,” meaning the waters are classified as suitable for drinking, culinary, and food processing purposes after conventional treatment; bathing, swimming and recreation; growth and propagation of salmonid fishes and associated aquatic life, waterfowl and furbearers; and agricultural and industrial water supply. The Water Quality Category is “5,” meaning the waters have one or more beneficial use impaired or threatened, and a TMDL plan is required to address the factors causing the impairment or threat. The surface water depletions anticipated from this proposed project will not affect water quality of Lake Koocanusa.

Determination: No significant impact.

Groundwater - *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

This change involves diverting water from Indian Creek that was historically used for stock and infiltrating it to shallow groundwater through a recharge basin to mitigate the Applicant’s proposed groundwater use and thus surface water depletion caused by the groundwater use. This change will not result in an increase in total diverted or consumed flow rate and volume over historic use.

Determination: No significant impact.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Water will be diverted from Indian Creek at a maximum rate of 0.11 CFS (50.0 GPM) using an infiltration gallery. An infiltration trench will be excavated approximately 2-feet below the low-water mark (approximately 3-feet wide and paralleling the bank for 15-feet). Ten feet of 6-inch stainless steel well screen with 0.080-inch slots will be installed within the trench to divert water from Indian Creek. Approximately 2.4 cubic yards of open-graded drain rock will be used to backfill the trench around the well screen to ensure sufficient permeability.

After collection in the infiltration gallery, a 6-inch PVC pipe will gravity feed water approximately 15 feet southwest to a buried 1,500-gallon concrete tank (a septic tank) which will act as a booster station. The flow rate will be limited to the proposed 50.0 GPM by an in-line flow control valve. Because water must be diverted year-round, 6-inch PVC pipe will be utilized to allow water to flow through the system to prevent the system from freezing. Although water will be diverted at a maximum rate of 50.0 GPM, most of the flow will be returned to Indian Creek within 75 feet of the point of diversion.

From the booster station, water will be diverted via a 0.25-HP Liberty Pump model 240 submersible sump pump. A 1.0-inch water main will convey the water approximately 550 feet from the booster station to the recharge basin. The Applicant estimates the proposed pumping conditions result in a total dynamic head (TDH) of 19 feet. Based on the provided pump curve, the pump can produce 4.0 GPM at 19 feet of TDH.

The recharge basin is designed to accept continual infiltration of 4.0 GPM. The USDA Soil Survey indicates the sandy loam in the vicinity of the recharge basin has the capacity to infiltrate 0.71 to 2.13 inches/hour (10.6 to 31.88 GPD/ft²). As a conservative measure, the lower infiltration rate of 0.71 inches/hour was used in the design. The preliminary recharge basin design uses five gravel-less absorption trenches, each 3-feet wide and 107-feet long. The laterals shall be located on 7-foot centers. The designed application rate includes a three-times safety factor to help maintain the recharge basin and mitigate the potential for plugging.

The volume of water diverted from Indian Creek and infiltrated into the shallow groundwater shall be measured by an in-line flow meter with a totalizer. The meter will measure the instantaneous rate of recharge and the total volume of water diverted. A dole valve will control flow to the recharge basin. The total volume of water will be recorded monthly.

The Department finds that the means of diversion and conveyance of water is adequate to distribute the requested flow rate and volume based upon the system design specifications. However, since the proposed mitigation plan overestimated the amount of volume needed to satisfy the intended purpose of mitigation the Applicant must adjust their system design and diversion schedule to divert only 3.22 GPM (0.007 CFS) and 5.20 AF/year from the pumping tank to the recharge basin.

Determination: No significant impact.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants, aquatic species, or any “species of special concern,” or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or “species of special concern.”

The Montana Natural Heritage Program website was reviewed to determine if there are any threatened or endangered fish, wildlife, plants, aquatic species, or any “species of special concern” in the project area that could be impacted by the proposed project. Twenty-one animal and five plant species of concern (Tables 1 and 2, respectively) were identified within the project area. Of these species, the Grizzly Bear (*Ursus arctos*), the Canada Lynx (*Lynx canadensis*), Spalding's Catchfly/Spalding's Campion (*Silene spaldingii*), the Whitebark Pine (*Pinus albicaulis*), and the Bull Trout (*Salvelinus confluentus*) are listed as threatened by the USFWS. An adequate quantity of water will still exist in the potentially affected surface water sources to maintain existing populations of Bull Trout, should they exist there currently. This area is already highly developed, and it is not anticipated that any species of concern will be further impacted by the proposed project.

| Table 1. Animal Species of Concern | | | |
|---|--|--|---|
| Bobolink (<i>Dolichonyx oryzivorus</i>) | Long-billed Curlew (<i>Numenius americanus</i>) | Grizzly Bear (<i>Ursus arctos</i>) | Long-eared Myotis (<i>Myotis evotis</i>) |
| Bull Trout (<i>Salvelinus confluentus</i>) | Common Loon (<i>Gavia immer</i>) | Hoary Bat (<i>Lasiurus cinereus</i>) | Long-legged Myotis (<i>Myotis volans</i>) |
| Canada Lynx (<i>Lynx canadensis</i>) | Evening Grosbeak (<i>Coccothraustes vespertinus</i>) | Lewis's Woodpecker (<i>Melanerpes lewis</i>) | Pacific Wren (<i>Troglodytes pacificus</i>) |
| Cassin's Finch (<i>Haemorhous cassinii</i>) | Fisher (<i>Pekania pennanti</i>) | Little Brown Myotis (<i>Myotis lucifugus</i>) | Pileated Woodpecker (<i>Dryocopus pileatus</i>) |
| Yuma Myotis (<i>Myotis yumanensis</i>) | Veery (<i>Catharus fuscescens</i>) | Westslope Cutthroat Trout (<i>Oncorhynchus clarkii lewisi</i>) | Torrent Sculpin (<i>Cottus rhotheus</i>) |
| Wolverine (<i>Gulo gulo</i>) | | | |

| Table 2. Plant Species of Concern | | | |
|--|---|--|--|
| Least Moonwort (<i>Botrychium simplex</i>) | Spalding's Catchfly/Spalding's Campion (<i>Silene spaldingii</i>) | Whitebark Pine (<i>Pinus albicaulis</i>) | Wood Lily (<i>Lilium philadelphicum</i>) |
| Many-headed Sedge (<i>Carex sychnocephala</i>) | | | |

Determination: No significant impact.

Wetlands - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: N/A, project does not involve wetlands.

Ponds - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: N/A, project does not involve ponds.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

The proposed multiple domestic and commercial uses will not negatively impact the soil quality, stability, or moisture content. The soil types in the project area are:

- Iphil-Truscreek-Downey complex, 0 to 10 percent slopes. Moderately high to high capacity to transmit water.
- McCollum-Buist family, stony-Downey, bouldery complex, 0 to 10 percent slopes. Moderately high to high capacity to transmit water.

Soils in this area are not likely susceptible to saline seep.

Determination: No significant impact.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

This area is already developed, and any existing native vegetation has likely already been disturbed. It is not anticipated that issuance of a water use permit will contribute to the establishment or spread of noxious weeds in the project area. Noxious weed prevention and control will be the responsibility of the landowners, who must follow local noxious weed regulations.

Determination: No significant impact.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

There will be no impact to air quality associated with issuance of the proposed permit for beneficial use of surface water.

Determination: No significant impact.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: N/A, project not located on State or Federal Lands.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water, and energy not already addressed.*

All impacts to land, water, and energy have been identified. No further impacts are anticipated.

Determination: No significant impact.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

The project is consistent with planned land uses.

Determination: No significant impact.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

The proposed project will not inhibit, alter, or impair access to present recreational opportunities in the area. The project is not expected to create any significant pollution, noise, or traffic congestion in the area that may alter the quality of recreational opportunities. The proposed place of use and diversion do not exist on land designated as wilderness.

Determination: No significant impact.

HUMAN HEALTH - *Assess whether the proposed project impacts human health.*

This proposed use will not adversely impact human health.

Determination: No significant impact.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*

Yes___ No X *If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.*

Determination: No impact.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

- (a) Cultural uniqueness and diversity? None identified.
- (b) Local and state tax base and tax revenues? None identified.
- (c) Existing land uses? None identified.
- (d) Quantity and distribution of employment? None identified.
- (e) Distribution and density of population and housing? None identified.
- (f) Demands for government services? None identified.
- (g) Industrial and commercial activity? None identified.
- (h) Utilities? None identified.
- (i) Transportation? None identified.
- (j) Safety? None identified.
- (k) Other appropriate social and economic circumstances? None identified.

2. ***Secondary and cumulative impacts on the physical environment and human population:***

Secondary Impacts: None identified.

Cumulative Impacts: None identified.

3. ***Describe any mitigation/stipulation measures:***

None.

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:***

The only alternative to the proposed action would be the no action alternative. The no action alternative would not authorize changing this volume of water from stock to mitigation use.

Part III. Conclusion

1. ***Preferred Alternative***

Authorize a water right change if the Applicant proves the criteria in 85-2-402 MCA are met.

2. ***Comments and Responses***

None.

3. ***Finding:***

Yes ___ No **X** Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

No significant impacts related to the proposed project have been identified.

Name of person(s) responsible for preparation of EA:

Name: Travis Wilson

Title: Water Resource Specialist

Date: 04 April 2023